

# Technical Analysis: USD/Gold

30% downside for the USD



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## COMMODITY | GOLD | TECHNICAL ANALYSIS

19 June 2017

- The dollar index (DXY) is currently moving in a secular downtrend based on the 98-month cycle
- Near term target DXY : 93 / Long term target DXY : 73
- Gold/Silver to do well exceptionally under a weak dollar environment
- Negative real interest rates to provide more tailwind for Gold/Silver

### 98 Month cyclical top

Since 1970s, the DXY has been following a 98-month cycle or approximately 8 year where it forms a cyclical top at the end of the 98<sup>th</sup> month. Each cyclical top is then followed by massive selloff resulting in the DXY collapsing back to the previous low from the prior downtrend. The selloffs ranged from 12% to 42% over the last four cycle.

Figure 1. 98-month cyclical top is formed, calling a 30% downside in DXY



Source: Bloomberg

In total, there were four instances where the DXY traded around 98-month cycle:

- 1) The largest selloff from the 98 month cycle happened exactly in the first cycle in June 1985 which took 104 months to form, caused the DXY to peak out at 164 and subsequently crashed to a low of 85.33 in December 1987 resulting in 42% loss.
- 2) The next cycle took 108 months to establish again in February 1994 where the DXY tumbled 15% from a high of 97 to a low of 80.05.
- 3) Another cyclical top happened in July 2001 which took 89 months to complete, successfully turned the uptrend around and started a major selloff taking the DXY down 40% from a high of 121 to a low of 70.69.
- 4) The most recent cyclical top was formed in April 2009 which took 92 months to formalize worked like a charm once again as it steered the DXY into another downtrend, taking the DXY down by 12% from 89.60 to 72.83.

Notice how every cyclical top results in a selloff that is in the order of magnitude that retests its prior respective lows and each cyclical top is being signaled by bearish price action such as Bearish Engulfing/Outside Bar or Shooting star.

### Tradable instruments:

#### PowerShares DB US Dollar Index Bear – (AMEX:UDN)

The UDN is an exchange traded fund that tracks the changes in value of Euro, Japanese Yen, Canadian Dollar, Swedish Krona and Swiss Franc relative to the US Dollar. It shorts the USDX contracts, essentially shorting the US Dollar and long the Euro, Japanese Yen, Canadian Dollar, Swedish Krona and Swiss Franc.

#### SPDR GLD US\$ – (SGX:O87)

#### SPDR Gold Trust – (AMEX:GLD)

SPDR Gold Shares (GLD) is an exchange-traded fund (ETF) that offers investors an innovative, relatively cost efficient and secure way to access the gold market. SPDR Gold Shares are intended to offer investors a means of participating in the gold bullion market without the necessity of taking physical delivery of gold, and to buy and sell that interest through the trading of security on a regulated stock exchange.

#### GLDUSD (Phillip Futures)

#### Ishares Silver Trust – (AMEX:SLV)

The Ishares Silver Trust (SLV) is an exchange-traded fund (ETF) that seeks to reflect generally the performance of the price of silver

#### SLVUSD (Phillip Futures)

Jeremy Ng (+65 6212 1857)  
Investment Analyst  
jeremyngch@phillip.com.sg

If we were to use the April 2009 cyclical top as the reference point for the current cycle calculation, using the 98-month average will bring us to May 2017. In other words, the range around May 2017 will be the timeframe to look out for the next cyclical top within the DXY. Keep in mind the 98-month cycle is a rough estimation of where to locate the cyclical top.

With the benefit of hindsight, the strong Bearish Outside bar rejection off the 103.50 resistance recently in January 2017 is pointing out that a new cyclical top has been formed. That also suggest the current cyclical top took 94 months to finalize which is well in range of the cyclical top formation of 89 months to 108 months. If history were to repeat, there is a high chance that the DXY will move into a forceful downtrend next to retest the previous decade low of 73 - 72. That move will translate into a -30% loss.

Near term target for the DXY will be around the 92.61 range low.

**Long Term Fibonacci Retracement Level**

To better pinpoint the exact timing of the cyclical top, we did a thorough price action study and the conclusion was that the DXY is still stuck in a depressed long term downtrend. We noticed the DXY tends to react to critical Fibonacci Retracement Level that was originated from prior long term downtrend.

**Figure 2. 61.8% critical Fibonacci Retracement Level currently resisting price**



Source: Bloomberg

During the recovery phase in 1995 – 2001, the DXY was moving in a stable uptrend. However, as it neared the 50% Fibonacci Retracement level (121) that was established in the downtrend since 1985, the DXY eventually reversed and turn into a downtrend in July 2001. Moreover, this bearish rejection off the 50% Fibonacci Retracement level happened in line with the 90-month cycle and was signaled by a Bearish Outside Bar and RSI Bearish Divergence as well.

Fast forward to current times, the DXY made another strong recovery since 2011 but the bullish momentum appears ready to reverse. The DXY once again reacted violently to the 61.8% Fibonacci Retracement level from the 2002 downtrend resulted in the formation of a Bearish Outside Bar rejection in January 2017. Furthermore, the current bearish rejection was in conjunction with the new 98-month cyclical top and RSI Bearish Divergence. The DXY has also closed back below the 100 psychological round number which successfully turned the sentiment back into the bearish camp.

Notice how similar the current cyclical top is to the one in July 2001. Both cyclical top were signaled by Bearish Outside Bar rejection off the respective critical Fibonacci Retracement level. In addition, the bearish rejection was also signaled by a broader bearish formation, heads and shoulder pattern/triple top pattern with RSI Bearish Divergence.

**VanEck Vectors Gold Miners ETF – (AMEX:GDX)**

*The VanEck Vectors Gold Miners ETF seeks to replicate as closely as possible, before fees and expenses, the price and yield performance of the NYSE Arca Gold Miners Index. The Index is intended to track the overall performance of companies involved in the gold mining industry.*

*The NYSE Arca Gold Miners Index is a modified market capitalisation weighted index primarily comprised of publicly traded companies involved in the mining of gold and silver.*

**VanEck Vectors Junior Gold Miners ETF – (AMEX:GDXJ)**

*The VanEck Vectors Junior Gold Miners ETF tracks a market cap weighted index of global gold and silver mining firms, focusing on SMALL-CAPS.*

*GDXJ covers precious metals mining firms below the market cap cutoff for GDX.*

*Its portfolio sometimes has more market risk due to the riskier nature of these smaller miners.*

**PureFunds ISE Junior SIL ETF – (AMEX:SILJ)**

*The PureFunds ISE Junior Silver ETF tracks a modified market cap weighted index of small cap silver mining and exploration companies.*

The US Dollar Index is an index of the United States dollar relative to a basket of foreign currencies, mainly against the Euro, Japanese Yen, Pound Sterling, Canadian Dollar, Swedish Krona and Swiss France.

**Figure 3. DXY Monthly chart - Neckline/uptrend line broken to the downside**



Source: Bloomberg

Once the neckline (uptrend line) from the 2001 Head and shoulders pattern was broken to the downside in May 2002, the DXY officially shifted into a secular downtrend. The bearish break below the neckline was the confirmation of the downtrend and the trigger for further selling. Additionally, the Relative Strength Index (RSI) was also signaling a weakening momentum as a bearish divergence occurred.

RSI reading above 70 signals an overbought condition while a RSI reading below 30 signals an oversold condition.

The bearish divergence is shown by the RSI forming a series of lower high while the DXY forms a series of higher high. The first warning sign was flashed in October 2000 when the RSI hit a high of 74, suggesting the top might be near. Two more series of lower high for the RSI appeared in June 2001 and January 2002 at 68 and 65 respectively further confirmed the bearish divergence as the DXY continued to make higher high. Combining the bearish break of the neckline, RSI bearish divergence and 98-month cycle pretty much warned about the major trend reversal in 2001 where the high was formed at 121 and the DXY subsequently crashed 41% to a low of 70.70.

A similar pattern is playing out once again, screaming RSI bearish divergence, head and shoulders/triple top pattern and 98-month cycle. An extreme overbought condition was met recently in March 2015 as the RSI stood at 82. Another lower high reading in the RSI appeared in November 2015 at 72 while the DXY continued to break new higher high. The last confirmation of the bearish divergence happened in December 2016 as the RSI put in another lower high point at 67 while the DXY produced another higher high point, confirming the cyclical peak at 103.65.

Moreover, the neckline/uptrend line for the head and shoulder pattern was also broken to the downside recently in May 2017 confirmed the bearish narrative and the start of a new secular bear market in DXY.

Another stark warning from the RSI was shown back in February 1985 when the RSI spiked to an extreme overbought region of 82, similar to the current environment where the RSI spiked to 82 in March 2015. The DXY began collapsing after the RSI renormalized back below the 70 overbought region in March 1985 which kick started the new secular downtrend in line with the 98-month cycle. That was the largest downturn in the DXY with a 50% drawdown.

Hence, expect the current downturn to suffer a similar price action for the DXY to retest the 73 - 72 previous low range.

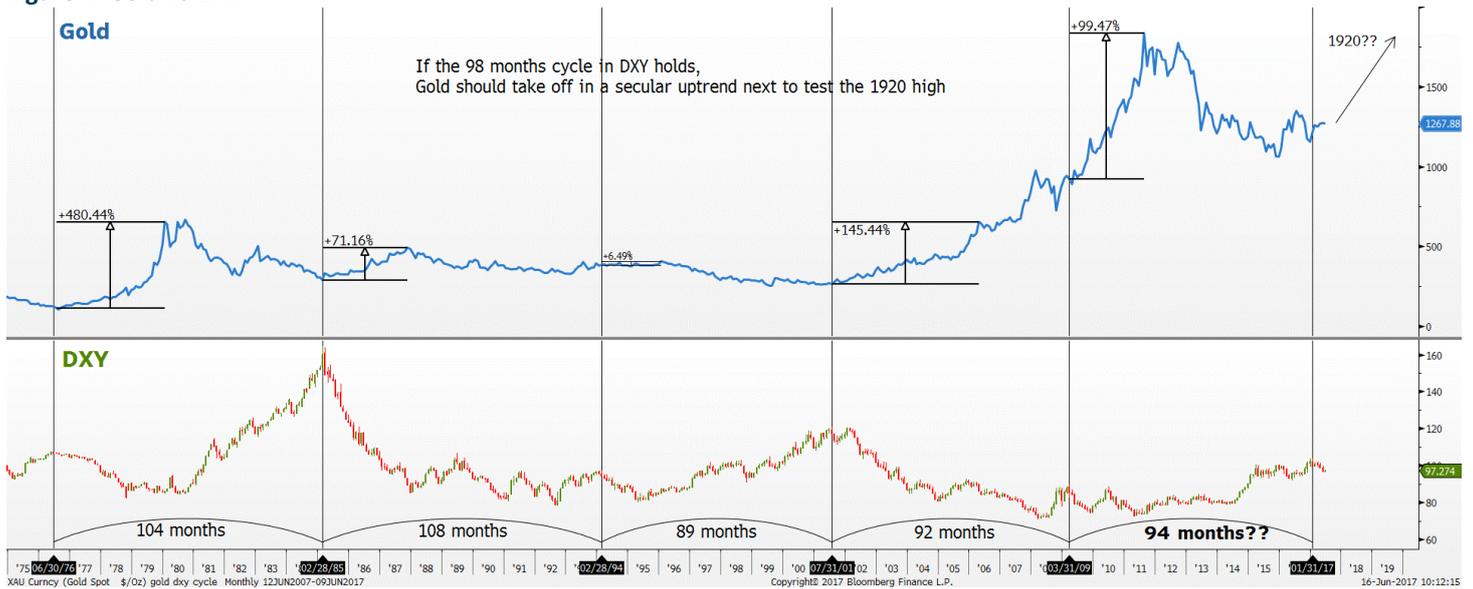
The RSI provides a good indication of extreme euphoria and extreme buying in the monthly timeframe when it exceeds the 70 overbought region because it takes a prolonged period of excessive buying to form which also provides a great deal of downside when the trend changes as show in the 1985 and 2001 secular downtrend.

All the stars are a line in terms of warning about a significant trend change to downside for the DXY.

**Gold to do well under the DXY secular downtrend**

On the flip side, Gold performed spectacularly well during the dollar cyclical downturn shown in the following chart. Gold also exhibits a similar 8 year cycle (96months) where it finds a cyclical low in every 8 years as explained in the “[8 year cycle report](#)”

**Figure 4. Gold vs DXY**

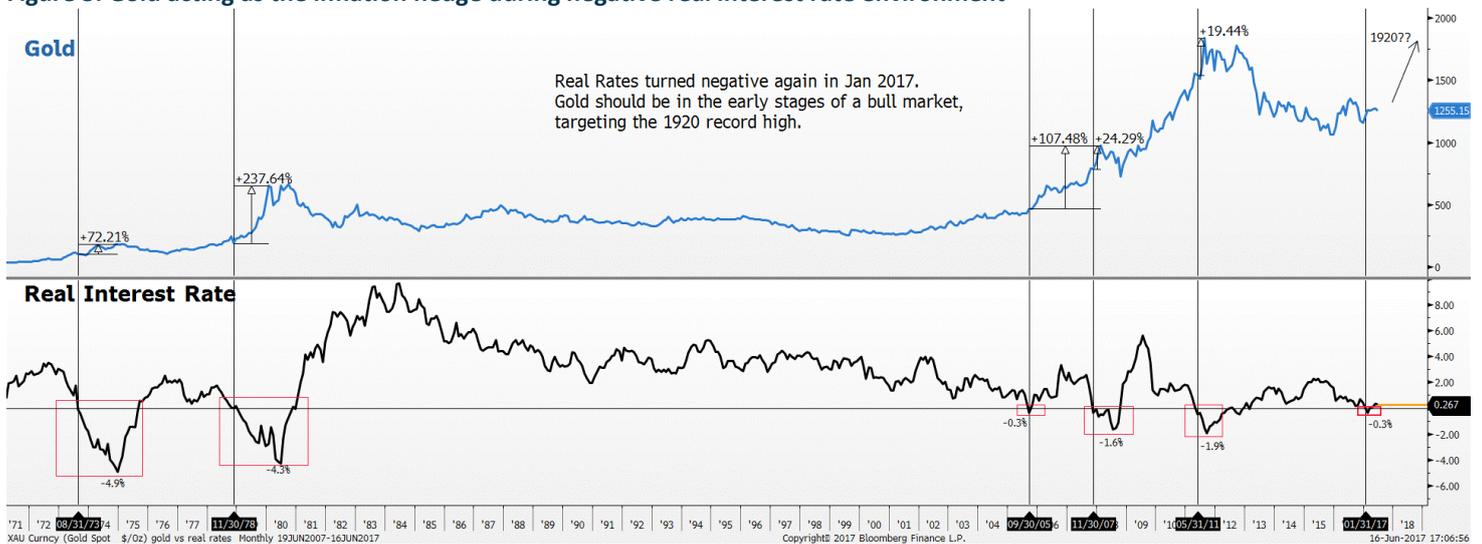


Source: Bloomberg

**Negative real interest rate – signaling the start of a Gold bull market**

Gold tends to do well in a declining real interest rate environment especially when the real interest rate falls below 0% into negative territory. Real interest rate is defined as the inflation adjusted interest rate and the measure that we use is the 10-year treasury yield less the consumer price index YoY change.

**Figure 5. Gold acting as the inflation hedge during negative real interest rate environment**



Source: Bloomberg

Historically, when the real interest rate declined steeply into the negative zone, it provided a good signal for the upcoming Gold rush. In August 1973, when the real interest rate first dipped below the 0 level, it subsequently signaled a Gold rally of 72%. The largest move in Gold came in November 1978 when the rate interest rate went into negative territory. Gold followed with a 237% appreciation as the real interest rate hit an extreme low of -4.3% in June 1980. Three more recent example when the rate rates entered into negative area occurred in September 2005, November 2007 and May 2011 where Gold reacted as an inflation hedge once again, gaining 107%, 24% and 19% respectively during the negative real rates environment.

Another flashing signal appeared lately in January 2017 when the real interest rate hit a low of -0.047%. If history is any precedence, we could expect Gold to take off in another bull run under the current negative real interest rate environment.

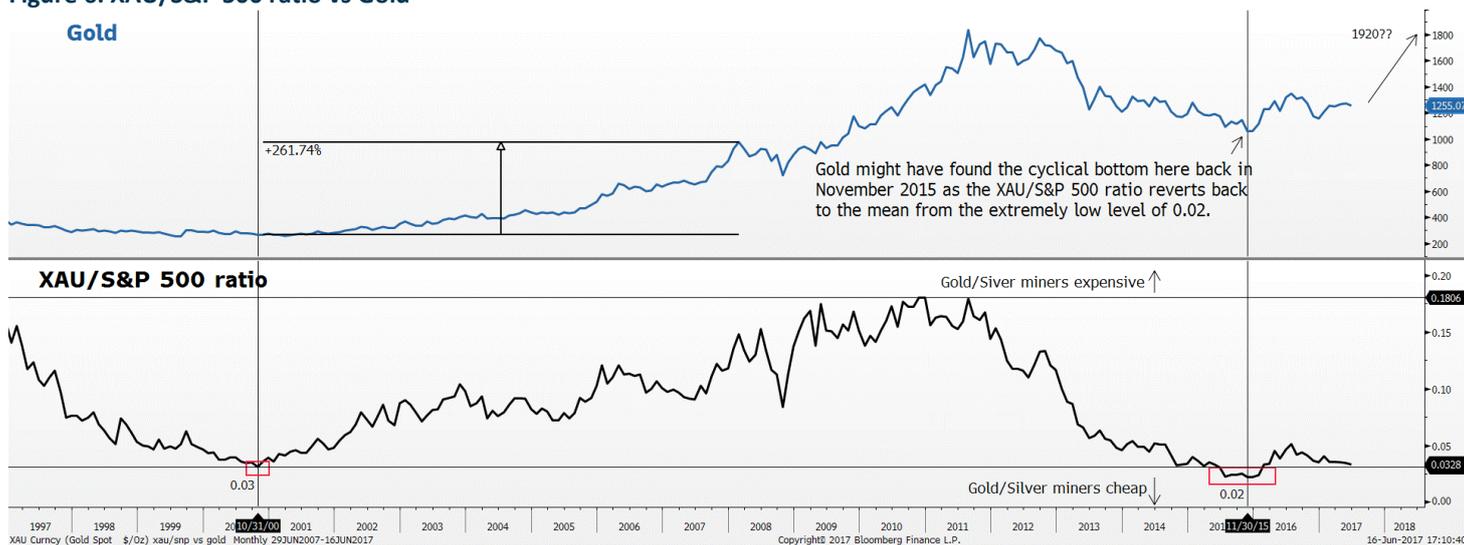
The reason why Gold does well under a negative real rates environment is because of the inflation hedge properties. In other words, by investing in treasury bonds when the yield is lesser than the inflation rate, investors stand to lose purchasing power. Hence, Gold naturally becomes the preferred asset under such condition due to the inflation hedge aspect and store of value properties which has been proven true historically.

**XAU/S&P 500 ratio – signaling the start of a Gold bull market**

The performance of the Miners within the Philadelphia Gold and Silver index has greatly underperform the S&P 500 companies since 2011 when the XAU/S&P 500 ratio fell from a high of 0.18 to a depressed level of 0.022 in November 2015. The last time the XAU/S&P 500 ratio was at such a depressed level was in October 2000, where Gold subsequently turned into a secular bull market in line with the 8 year cycle and appreciated 261% in the following 7 years.

The Philadelphia Gold and Silver index (XAU) is an index of 30 precious metal mining companies listed on the Philadelphia stock exchange.

**Figure 6. XAU/S&P 500 ratio vs Gold**



Source: Bloomberg

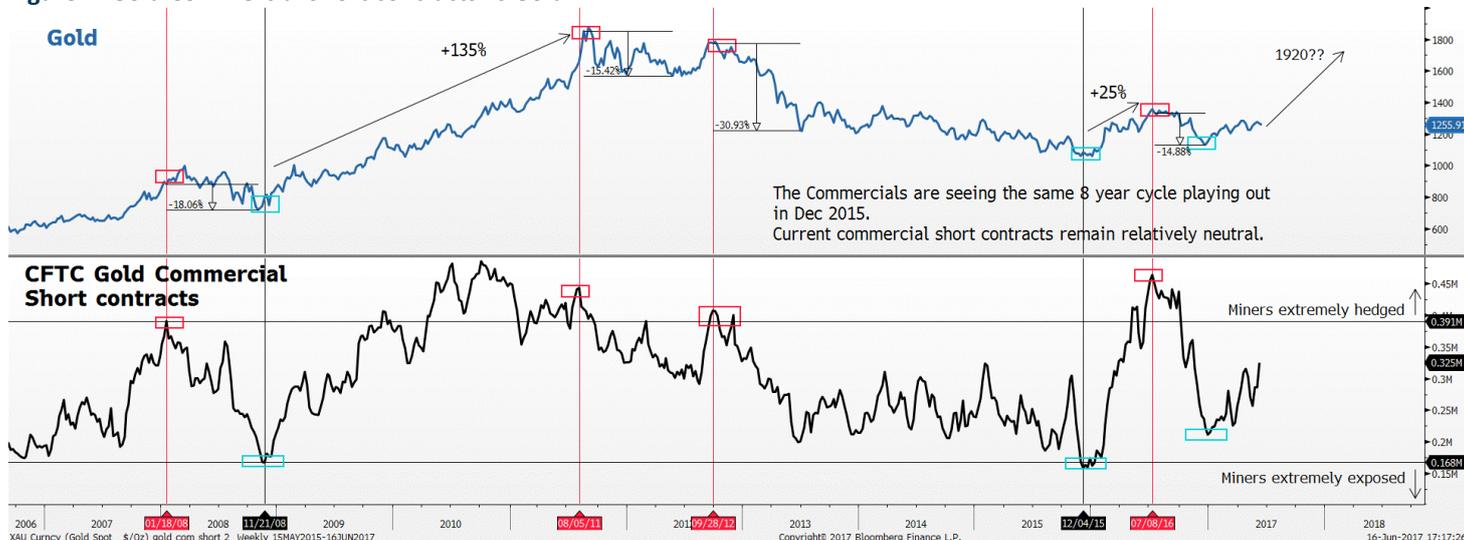
As the XAU/S&P 500 ratio enters into a reversion to the mean mode from the extreme low point, it provided a good signal of an upcoming bull market as the gold/silver miners outperform the broad base equity market.

The recent reversal in the XAU/S&P 500 ratio from the extreme low of 0.022 in November 2015 has correctly predicted the 8-year cyclical bottom in Gold as Gold rebounded sharply off the 1061 low. If the reversion to mean pattern holds for the XAU/S&P 500 ratio, then we can expect Gold to continue to move along the new secular uptrend since November 2015 to retest the 1920 all-time high.

**Gold Commercial short position – signaling the start of a Gold bull market**

The Commitment of Traders report from the Commercial short position offers a better story of what is happening within the Gold Market as the Miners know better in terms of the physical supply and demand dynamics. A low reading will mean the Miners are less willing to hedge their Gold exposure as they anticipate higher Gold price while a high reading suggests Miners are actively hedging their Gold exposure as they anticipate lower Gold price.

**Figure 7. Gold Commercial Short contracts vs Gold**



Source: Bloomberg

Under current market environment, the low range in the short contracts is approximately around 168,000 contracts while the high range is approximately around 391,000 contracts.

In November 2008, when the Commercial Short contracts reached the extreme low of 168,000 contracts, Gold perfectly bottomed out as the Miners expected higher prices. A similar occurrence happened again in December 2015 when the Commercial short contracts hit a record low of 158,000 contracts showing the willingness of the Miners to get exposed to the Gold price movement. The Miners once again perfectly predicted the movement in Gold as it formed the cyclical low and entered into a secular bull market. The run up in Gold during that period was a 25% rally.

On the other hand, when the Miners are extremely hedged as reflected by the Commercial Short contracts exceeding 391,000 contracts, a major sell off in Gold usually follows. In January 2008, the Commercial Short contracts hit the 391,000 contracts, resulted in a 18% correction in Gold.

The 2011 all-time high in Gold was also signaled by the Miners as the Commercial Short contracts hit a high of 443,000 contracts in August 2011 which ultimately spelled the top in Gold the following month in September 2011. Gold fell 15% during that period and ultimately reversed the prior uptrend.

Another major selloff in Gold came in September 2012 and November 2012 when the Commercial short contracts exceeded the 391,000 contracts once again, knocking Gold down 30% from a high of 1781 to a low of 1215.

The recent selloff in the second half of 2016 was also foreseen by the Miners as they were extremely hedged in their Gold exposure with the Commercial Short contracts reaching a peak of 464,000 contracts in July 2016. The extreme short positions lead to a 16% decline in Gold price from 1356 to 1132.

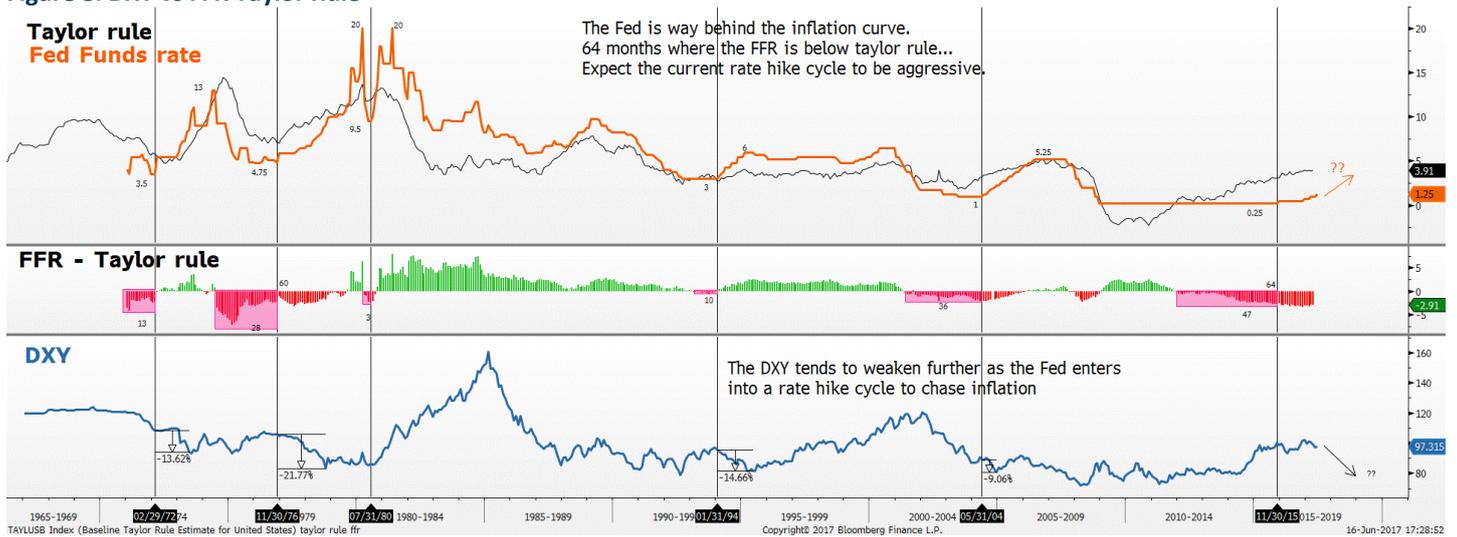
The current outlook from the commercial short contract still supports the bullish thesis in Gold as the Miners remain relatively neutral in their hedge books. As long as the Commercial short contracts remains below the 391,000 extreme level, Gold should continue to move comfortably within the secular uptrend.

In summary, the new secular downtrend in the DXY based on the 98-month cycle will greatly benefit Gold/Silver moving forward and we reiterate our bullish view on Gold and Silver with the long term target of 1920 and 48 respectively.

**Appendix: Interest rate hike cycle can weaken the DXY**

Historically, when the Fed is behind the curve in raising rates, as suggested by the negative Fed Fund Rate and Taylor Rule spread, the effect is a weaker DXY. The DXY enters into prolonged bear market when the Fed enters into a rate hike cycle to chase inflation. A negative spread suggests a lower Fed Funds Rate as oppose to the Taylor Rule inferred interest rate.

**Figure 8. DXY vs FFR Taylor Rule**



\* Vertical line demarcates the start of the rate hike cycle

Source: Bloomberg

For example, in November 1976, the Fed embarked on a rate hike cycle where they took the Fed Fund Rate up from 4.75% to 9.8% over 2 years with no effect on stifling the dollar selloff. The rate hike cycle that began in November 1976 resulted in the DXY falling 21% from 106.10 to 83.07. That was the result of delayed rate hike as shown by the negative Fed Fund Rate and Taylor Rule spread where it was negative for the past 28 months before the Fed took action to raise rates.

The most recent rate hike example with a negative Fed Fund Rate and Taylor Rule spread happened in May 2004 where the spread stayed negative for the past 36 months before the Fed decided to raise rates. During that rate hike cycle, the DXY fell instead and lost 9%.

After leaving the Fed Funds rate at 0.25% for the past 8 years, the Fed finally began their rate hike cycle in December 2015 after 47 months of negative Fed Funds Rate and Taylor Rule spread. The 47 months of negative spread was also the longest in history for the Fed to delay the rate hike cycle.

Since the December 2015 rate hike cycle, the DXY has remained relatively flat in terms of price action but we believe the DXY will be pressured to the downside regardless of the aggressive tightening phase as the Fed is currently chasing the curve. History have shown how a delayed rate hike cycle ends up with a weakening dollar instead.

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## Contact Information (Singapore Research Team)

## Head of Research

Paul Chew – [paulchewkl@phillip.com.sg](mailto:paulchewkl@phillip.com.sg)

## Research Operations Officer

Mohamed Amiruddin – [amiruddin@phillip.com.sg](mailto:amiruddin@phillip.com.sg)

## Consumer | Healthcare

Soh Lin Sin – [sohls@phillip.com.sg](mailto:sohls@phillip.com.sg)

## Property | Infrastructure

Peter Ng – [peterngmc@phillip.com.sg](mailto:peterngmc@phillip.com.sg)

## Macro

Pei Sai Teng – [peist@phillip.com.sg](mailto:peist@phillip.com.sg)

## Transport | REITs (Industrial)

Richard Leow, CFTe, FRM –  
[richardleowwt@phillip.com.sg](mailto:richardleowwt@phillip.com.sg)

## REITs (Commercial, Retail, Healthcare) | Property

Dehong Tan – [tandh@phillip.com.sg](mailto:tandh@phillip.com.sg)

## Technical Analysis

Jeremy Ng – [jeremyngch@phillip.com.sg](mailto:jeremyngch@phillip.com.sg)

## Banking and Finance

Jeremy Teong – [jeremyteongfh@phillip.com.sg](mailto:jeremyteongfh@phillip.com.sg)

## US Equity

Ho Kang Wei – [hokw@phillip.com.sg](mailto:hokw@phillip.com.sg)

## Oil &amp; Gas | Energy

Chen Guangzhi – [chengz@phillip.com.sg](mailto:chengz@phillip.com.sg)

## Contact Information (Regional Member Companies)

## SINGAPORE

## Phillip Securities Pte Ltd

Raffles City Tower  
250, North Bridge Road #06-00  
Singapore 179101  
Tel +65 6533 6001  
Fax +65 6535 6631  
Website: [www.poems.com.sg](http://www.poems.com.sg)

## MALAYSIA

## Phillip Capital Management Sdn Bhd

B-3-6 Block B Level 3 Megan Avenue II,  
No. 12, Jalan Yap Kwan Seng, 50450  
Kuala Lumpur  
Tel +603 2162 8841  
Fax +603 2166 5099  
Website: [www.poems.com.my](http://www.poems.com.my)

## HONG KONG

## Phillip Securities (HK) Ltd

11/F United Centre 95 Queensway  
Hong Kong  
Tel +852 2277 6600  
Fax +852 2868 5307  
Websites: [www.phillip.com.hk](http://www.phillip.com.hk)

## JAPAN

## Phillip Securities Japan, Ltd.

4-2 Nihonbashi Kabuto-cho Chuo-ku,  
Tokyo 103-0026  
Tel +81-3 3666 2101  
Fax +81-3 3666 6090  
Website: [www.phillip.co.jp](http://www.phillip.co.jp)

## INDONESIA

## PT Phillip Securities Indonesia

ANZ Tower Level 23B,  
Jl Jend Sudirman Kav 33A  
Jakarta 10220 – Indonesia  
Tel +62-21 5790 0800  
Fax +62-21 5790 0809  
Website: [www.phillip.co.id](http://www.phillip.co.id)

## CHINA

## Phillip Financial Advisory (Shanghai) Co Ltd

No 550 Yan An East Road,  
Ocean Tower Unit 2318,  
Postal code 200001  
Tel +86-21 5169 9200  
Fax +86-21 6351 2940  
Website: [www.phillip.com.cn](http://www.phillip.com.cn)

## THAILAND

## Phillip Securities (Thailand) Public Co. Ltd

15th Floor, Vorawat Building,  
849 Silom Road, Silom, Bangrak,  
Bangkok 10500 Thailand  
Tel +66-2 6351700 / 22680999  
Fax +66-2 22680921  
Website: [www.phillip.co.th](http://www.phillip.co.th)

## FRANCE

## King &amp; Shaxson Capital Limited

3rd Floor, 35 Rue de la Bienfaisance 75008  
Paris France  
Tel +33-1 45633100  
Fax +33-1 45636017  
Website: [www.kingandshaxson.com](http://www.kingandshaxson.com)

## UNITED KINGDOM

## King &amp; Shaxson Capital Limited

6th Floor, Candlewick House,  
120 Cannon Street,  
London, EC4N 6AS  
Tel +44-20 7426 5950  
Fax +44-20 7626 1757  
Website: [www.kingandshaxson.com](http://www.kingandshaxson.com)

## UNITED STATES

## Phillip Capital Inc

141 W Jackson Blvd Ste 3050  
The Chicago Board of Trade Building  
Chicago, IL 60604 USA  
Tel +1-312 356 9000  
Fax +1-312 356 9005  
Website: [www.phillipusa.com](http://www.phillipusa.com)

## AUSTRALIA

## Phillip Capital Limited

Level 10, 330 Collins Street  
Melbourne, Victoria 3000, Australia  
Tel +61-03 9629 8288  
Fax +61-03 9629 8882  
Website: [www.phillipcapi.com.au](http://www.phillipcapi.com.au)

## SRI LANKA

## Asha Phillip Securities Limited

2<sup>nd</sup> Floor, Lakshmans Building,  
No. 321, Galle Road,  
Colombo 03, Sri Lanka  
Tel: (94) 11 2429 100  
Fax: (94) 11 2429 199  
Website: [www.ashaphillip.net](http://www.ashaphillip.net)

## INDIA

## PhillipCapital (India) Private Limited

No.1, 18th Floor, Urmi Estate  
95, Ganpatrao Kadam Marg  
Lower Parel West, Mumbai 400-013  
Maharashtra, India  
Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969  
Website: [www.phillipcapital.in](http://www.phillipcapital.in)

## TURKEY

## PhillipCapital Menkul Degerler

Dr. Cemil Bengü Cad. Hak Is Merkezi  
No. 2 Kat. 6A Caglayan  
34403 Istanbul, Turkey  
Tel: 0212 296 84 84  
Fax: 0212 233 69 29  
Website: [www.phillipcapi.com.tr](http://www.phillipcapi.com.tr)

## DUBAI

## Phillip Futures DMCC

Member of the Dubai Gold and  
Commodities Exchange (DGCX)  
Unit No 601, Plot No 58, White Crown Bldg,  
Sheikh Zayed Road, P.O.Box 212291  
Dubai-UAE  
Tel: +971-4-3325052 / Fax: + 971-4-3328895

## CAMBODIA

## Phillip Bank Plc

Ground Floor of B-Office Centre,#61-64,  
Norodom Blvd Corner Street 306,Sangkat  
Boeung Keng Kang 1, Khan Chamkamorn,  
Phnom Penh, Cambodia  
Tel: 855 (0) 7796 6151/855 (0) 1620 0769  
Website: [www.phillipbank.com.kh](http://www.phillipbank.com.kh)

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